

keep scrolling to get
a sneak peek!

Help your Algebra students
review **graphing absolute
value** skills with these space
themed review stations!

Students will be eager to get
the self-checking & student
choice benefits from these
activities!

GRAPHING ABSOLUTE VALUE REVIEW Algebra Stations

ANSWER KEY

STATION 1: ROCKET LAUNCH MATCH!
Directions: Graph the absolute value and identify the vertex and how it opens. Start with any station and answer it. Draw a line to the answer. Then write the letter in the long box below.

1. $y = |x - 3| + 2$
2. $y = |x + 4| - 1$
3. $y = -|x - 2| + 5$
4. $y = |x| - 4$

STATION 2: SATELLITE INTERSECTION
Directions: Graph each absolute value function and identify the vertex and transformations. Write the letter that your graph crosses through in the corresponding question number at the bottom.

1. $f(x) = |x - 2| + 3$
2. $f(x) = |x + 4| - 1$
3. $f(x) = -|x - 1| + 4$

5. Graph the absolute value function and identify the key features.
 $f(x) = -|x - 2| + 5$

8. Graph the absolute value function and identify the key features.
 $f(x) = -2|x - 1| + 4$

5. Graph the absolute value function and identify the key features.
 $f(x) = \frac{1}{2}|x| - 4$

6. $f(x) = -2|x - 4| - 2$

Vertex: (1, 4)
Transformations: Reflect over x-axis, Right 1, Up 4

Math with Ms. Rivera

4 Station Activities & Answer Keys

© Malia Rivera, 2026

Why do you need this?

Graphing Absolute Value Review Stations



There are a variety of activities that cover several topics.



Help your students practice these essential math skills.



The activities have self-checking components so students can receive feedback!

The image shows a stack of review station worksheets. The top sheet is titled "STATION 1: ROCKET LAUNCH" and contains several problems for graphing absolute value functions. The functions listed are:

- $f(x) = |x - 5| - 3$
- $f(x) = -|x + 2| + 6$
- $f(x) = |x - 3| + 2$
- $f(x) = |x + 4| - 1$
- $f(x) = -|x + 1| - 3$
- $f(x) = 2|x - 1| + 1$

Each problem includes a coordinate plane for graphing and a set of directions. The bottom sheet is an "ANSWER KEY" for Station 1, providing the vertex, axis of symmetry (AOS), opening direction, domain, and range for each function. For example, for $f(x) = |x - 5| - 3$, the vertex is $(5, -3)$, AOS is $x = 5$, it opens up, the domain is $(-\infty, \infty)$, and the range is $[-3, \infty)$.

Graphing Absolute Value Review Stations *includes:*

The image shows three overlapping station activity sheets. The top sheet is 'STATION 2: SATELLITE INTERSECTION' with an 'Answer Key' header. It contains three problems: 1. $f(x) = |x - 2| + 3$, 2. $f(x) = |x + 4| - 1$, and 3. $f(x) = -|x - 1| + 4$. Each problem includes a coordinate plane with a graphed absolute value function and a table for 'Vertex' and 'Transformations'. The bottom sheet is 'STATION 4: ORBIT PRACTICE' with a 'Name' and 'Date' header. It contains five problems, each with a coordinate plane and a table for 'Vertex', 'AOS', 'Opens', 'Domain', and 'Range'. The middle sheet is a larger station activity with six problems, each with a coordinate plane, a table for 'Vertex', 'AOS', 'Opens', 'Domain', and 'Range', and a small telescope icon. The problems are: 1. $f(x) = |x - 3| + 2$, 2. $f(x) = |x + 4| - 1$, 3. $f(x) = -|x - 2| + 5$, 4. $f(x) = 2|x + 1| + 3$, 5. $f(x) = \frac{1}{2}|x| - 4$, and 6. $f(x) = -|x + 3| + 2$. Each problem includes a coordinate plane and a table for 'Vertex', 'AOS', 'Opens', 'Domain', and 'Range'. The sheets also include a 'Mystery Word' section at the bottom of Station 2 and a 'Mystery Word' section at the bottom of Station 4.

- ✓ 4 printable station activities
- ✓ answer keys
- ✓ teacher & student directions
- ✓ color & printer-friendly versions

station 1 - Rocket Launch Match

Skill: Graphing & Identifying Key Features

Students will be given an absolute value function to graph and identify the vertex and how it opens. Students will connect the question to the answer (planet) to identify a letter in the mystery word. This is **self-checking** since the word that is revealed must be spelled correctly.

Includes:

- 8 questions
- recording sheet to show work
- detailed answer key

ANSWER KEY

Name: _____ Date: _____ Class: _____

STATION 1: ROCKET LAUNCH MATCH!

Directions: Graph the absolute value and identify the vertex and how it opens. Start with any question and answer it. Draw a line to the answer. Then write the letter in the long box below.

1 $y = |x - 3| + 2$ 2 $y = |x + 4| - 1$ 3 $y = -|x - 2| + 5$ 4 $y = |x| - 4$

5 $y = -|x + 1| - 3$ 6 $y = 2|x - 1| + 1$ 7 $y = \frac{1}{2}|x + 2| + 3$ 8 $y = -2|x| + 4$

Directions: Write down the letter from each correct answer in the space below. Use the hint to unscramble the word before moving on to the next station.

Hint: A small rocks orbiting the sun. A bunch of these together can be found in a belt.

© Malia Rivera, 2026

station 2 - Satellite Intersection

Skill: Graphing & Identifying Transformations

Students will graph the given an absolute value equation to graph and identify the transformations. The correct graph will intersect a satellite with a letter on it. This is self-checking because the letters will reveal a mystery word at the bottom.

Includes:

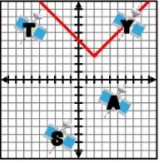
- 6 questions
- Detailed answer key

Name: **Answer Key** Date: _____

STATION 2: SATELLITE INTERSECTION

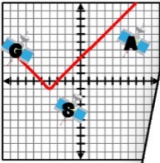
Directions: Graph each absolute value function and identify the vertex and transformation(s). Write the letter that your graph crosses through in the corresponding question number at the bottom to reveal a mystery word.

1. $f(x) = |x - 2| + 3$



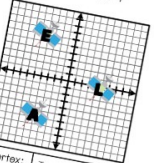
Vertex: (2, 3) Transformations: Right 2, Up 3

2. $f(x) = |x + 4| - 1$



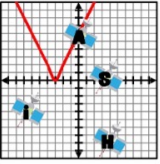
Vertex: (-4, -1) Transformations: Left 4, Down 1

3. $f(x) = -|x - 1| + 4$



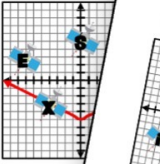
Vertex: (1, 4) Transformations: Right 1, Down 1

4. $f(x) = 2|x + 3|$



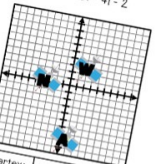
Vertex: (-3, 0) Transformations: Vertical Stretch by 2, Left 3

5. $f(x) = \frac{1}{2}|x| - 5$



Vertex: (0, -5) Transformations: Vertical Stretch by 1/2, Down 5

6. $f(x) = -2|x - 4| - 2$



Vertex: (4, -2) Transformations: Vertical Stretch by 2, Reflection, Right 4, Down 2

The _____ we live in is called the Milky Way.

2 4 3 6 5 1

© Malia Rivera, 2026

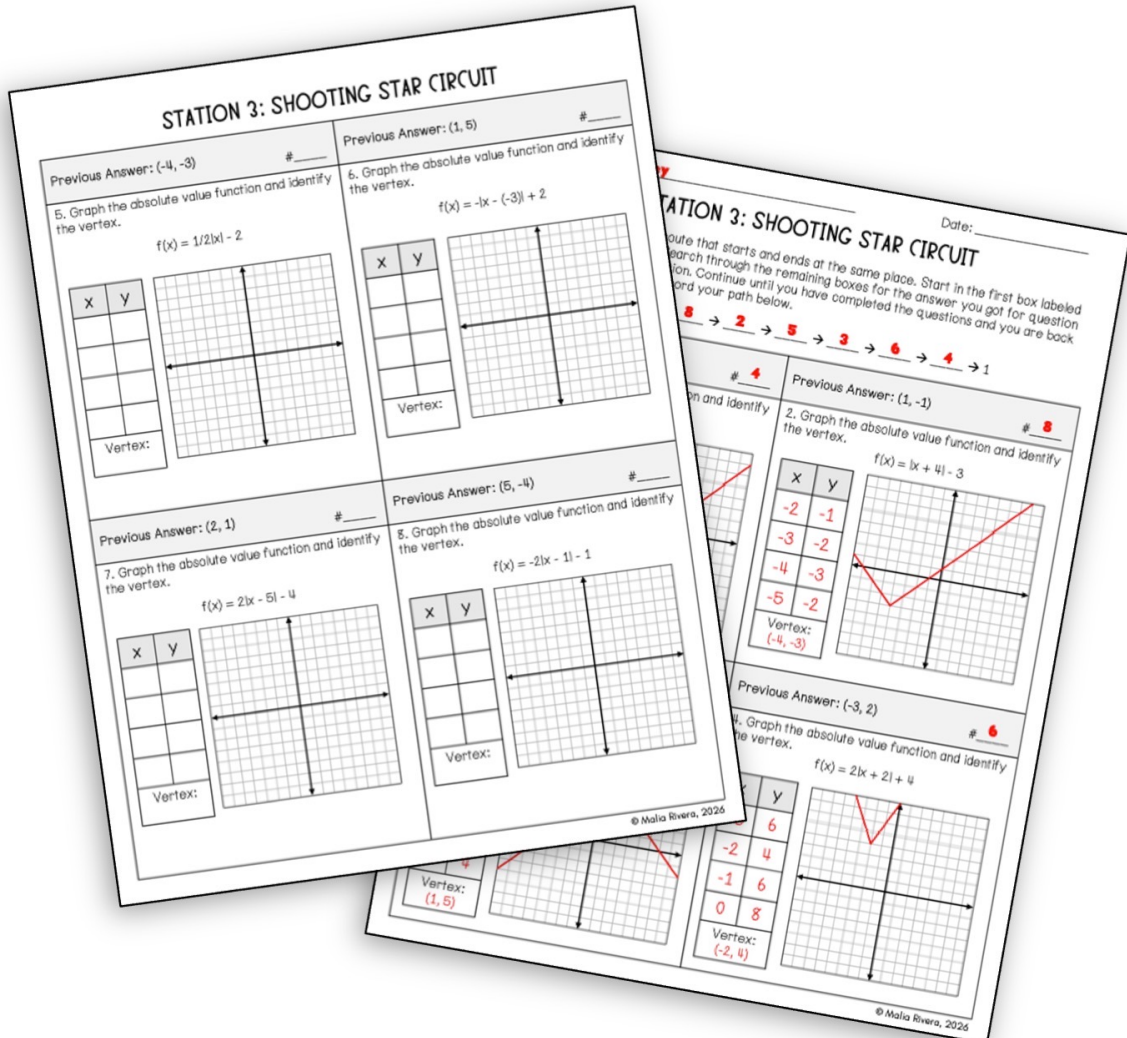
station 3 - Shooting Star Circuit

Skill: Creating & Graphing a Table of Values

With this self-checking circuit worksheet, students will start with question 1 and create a table of values, graph, and identify the vertex. They search for the vertex above their next problem to solve. They will have completed the circuit correctly if they answer all the problems and end back up at the first question to complete the loop.

Includes:

- 8 questions
- detailed answer key



station 4 - Orbit Practice

Skill: Identifying Key Features of Ellipses from Equations & Graphs

Given the equation of the absolute value function, students will need to graph and identify the vertex, axis of symmetry, how it opens, and the domain and range. These task cards can be self-checking if you choose to print them with the answers on the back.

Includes:

- 12 questions
- recording sheet
- Answer key

7 Graph the absolute value function and identify the key features.
 $f(x) = |x - 5| - 3$

8 Graph the absolute value function and identify the key features.
 $f(x) = -2|x - 1| - 1$

9 Graph the absolute value function and identify the key features.
 $f(x) = -|x + 2| + 6$

10 Graph the absolute value function and identify the key features.
 $f(x) = -|x| + 5$

11 Graph the absolute value function and identify the key features.

12 Graph the absolute value function and identify the key features.

5 Graph the absolute value function and identify the key features.
 $f(x) = \frac{1}{2}|x| - 4$

11 Graph the absolute value function and identify the key features.
 $f(x) = 3|x - 2|$

ANSWER KEY

STATION 4: ORBIT PRACTICE Date: _____ Class: _____

Work from each question in the space below.

1. Vertex: (3, 2)
AOS: $x = 3$
Opens: Up
Domain: $(-\infty, \infty)$
Range: $[2, \infty)$

2. Vertex: (-4, -1)
AOS: $x = -4$
Opens: Up
Domain: $(-\infty, \infty)$
Range: $[-1, \infty)$

3. Vertex: (-1, 3)
AOS: $x = -1$
Opens: Up
Domain: $(-\infty, \infty)$
Range: $[3, \infty)$

4. Vertex: (-3, 2)

Graphing Absolute Value Review Stations

standards covered:

CCSS: HSF-IF.C.7b

TEKs: A2.6.C

VA SOLs: F.All.7.g, F.All.6.b
F.All.7.a

STATION 1: ROCKET LAUNCH MATCH!

Teacher Directions:
At this station, students will be practicing to identify the center, vertices, co-vertices, or foci of the given ellipse. Once students have their correct answer, they are going to record the letter underneath the soccer goal net at the bottom of the page. Once all the questions are answered, students will unscramble the letters to form the word "asteroid".

This station is self-checking, as incorrect solutions may not appear as an answer choice.

Printing Directions:

- Print enough copies of the Rocket Launch Match! and the recording worksheets for each student.
- I recommend NOT printing double sided.

... is an answer key is included.

Graph the absolute value function and identify the key features.

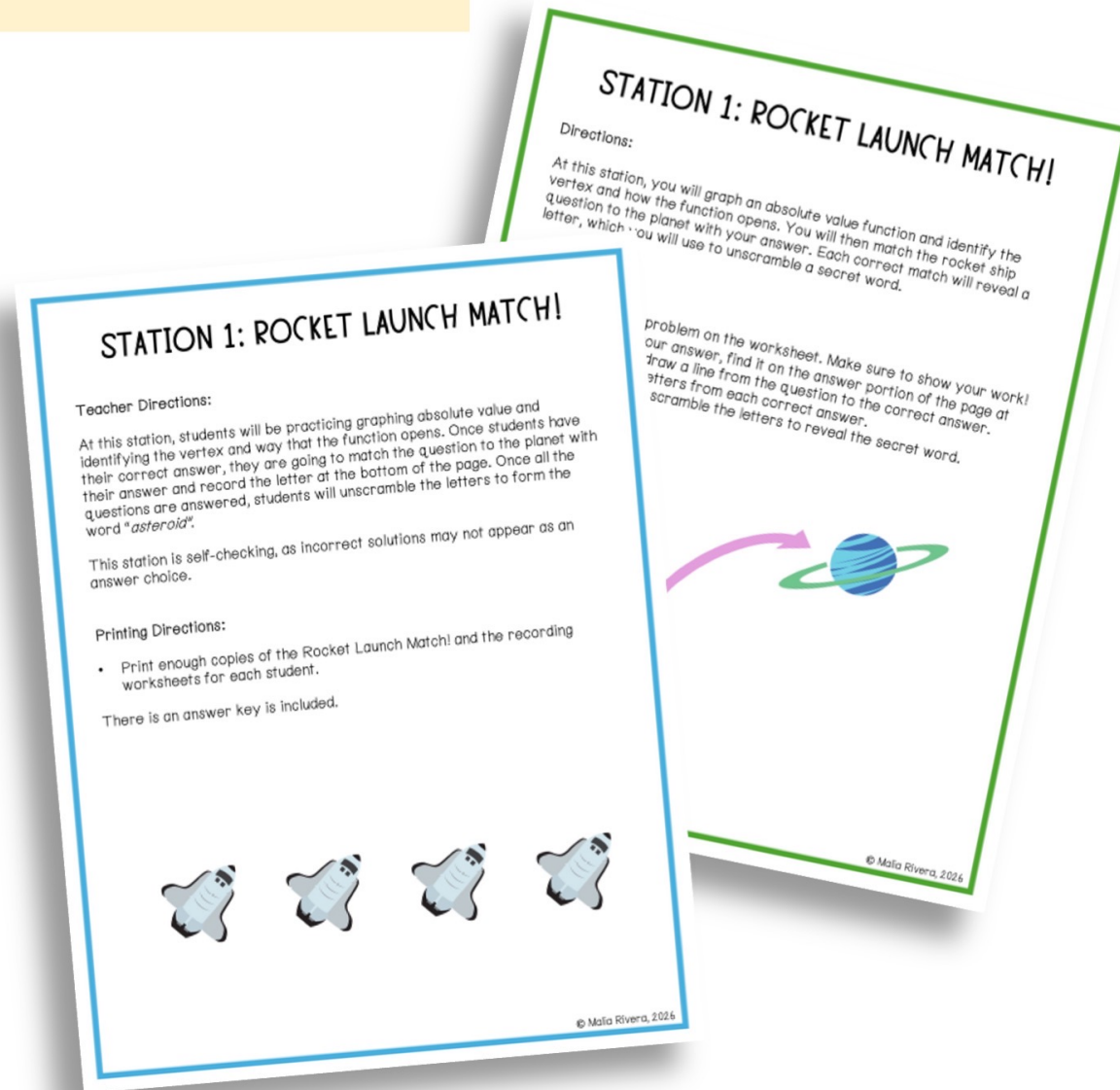
$$f(x) = 3|x - 4| + 4$$

Vertex: (0, -4)
AOS: $x = 0$
Opens: Up
Domain: $(-\infty, \infty)$
Range: $[-4, \infty)$

© Malia Rivera, 2026

Graphing Absolute Value Review Stations

Teacher and printing directions included. Student directions to be printed at each station are also included!



how to use this resource

7 Graph the absolute value function and identify the key features.
 $f(x) = |x - 5| - 3$

8 Graph the absolute value function and identify the key features.
 $f(x) = |x - 5| - 3$

9 Graph the absolute value function and identify the key features.
 $f(x) = -|x + 2| + 6$

10 Graph the absolute value function and identify the key features.
 $f(x) = 3|x - 2|$

Name: **Answer Key**

STATION 2: SATELLITE INTERSE

Directions: Graph each absolute value function and identify the vertex and the letter that your graph crosses through in the corresponding question to reveal a mystery word.

1. $f(x) = |x - 2| + 3$
 Vertex: (2, 3) Transformations: Right 2, Up 3

2. $f(x) = |x + 4| - 1$
 Vertex: (-4, -1) Transformations: Left 4, Down 1

3. $f(x) = |x - 5| - 3$
 Vertex: (5, -3) Transformations: Right 5, Down 3

4. $f(x) = 2|x + 3|$
 Vertex: (-3, 0) Transformations: Vertical Stretch by 2, Left 3

5. $f(x) = \frac{1}{2}|x - 5| - 5$
 Vertex: (5, -5) Transformations: Vertical Compression by 1/2, Down 5

The _____ we live in is called _____

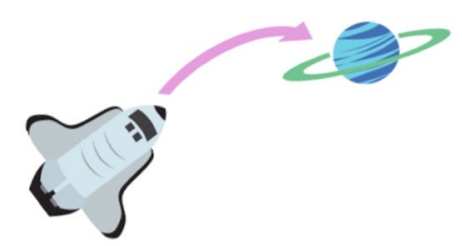
G	A	L	A
2	4	3	6

STATION 1: ROCKET LAUNCH MATCH!

Directions:
 At this station, you will graph an absolute value function and identify the vertex and how the function opens. You will then match the rocket ship question to the planet with your answer. Each correct match will reveal a letter, which you will use to unscramble a secret word.

Instructions:

- Start with any problem on the worksheet.
- Once you get your answer, find it on the answer portion of the page at the bottom and draw a line from the question to the correct answer.
- Write down the letters from each correct answer.
- Use the hint to unscramble the letters to reveal the secret word.



© Malia Rivera, 2026

This is a great activity to use when reviewing for an **absolute value unit** assessment or as an end of year review.



hey there!

My name is Malia and I'm passionate about making learning and practicing math fun. I love creating engaging math resources for my students and I hope your students enjoy this activity too!

Did you know you could get **FREE** money from TPT??

All you need to do is leave feedback on the product after you purchase. [Click here](#) to leave reviews and earn credits towards your next TPT purchase!

let's connect!



Follow my TPT store



Follow my Instagram



Email me